



# Safety Data Sheet

Issue Date: 13-Nov-2014

Revision Date: 6-Jul-2018

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Thermaflo® 59

### Other means of identification

**SDS #** CG-009

**Synonyms** T-59

### Recommended use of the chemical and restrictions on use

**Recommended Use** Heat transfer fluid.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Chem Group, LLC  
2406 Lynch Road  
Evansville, IN 47711  
www.chem-group.com

### Emergency Telephone Number

**Company Phone Number** Non ER questions 800-489-2306 / 812-464-4446  
**Emergency Telephone (24 hr)** Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

## 2. HAZARDS IDENTIFICATION

**Appearance** Light yellow liquid

**Physical State** Liquid

**Odor** Faint aromatic odor

### Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

### Unknown Acute Toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity

**Precaution**

An improperly designed or maintained heat transfer system may permit the release of fluid, or air/moisture leakage into the system. This leakage could lower the fluid's flashpoint and/or produce light ends.

System leaks that result in saturated insulation may, when heated over time, create a combustible mixture when suddenly exposed to air. Leakage of fluid from the system at operating temperature and pressure may cause fluid to disperse as an aerosol, which may result in flammable concentrations of vapor in the air.

Thermal degradation or other decomposition of the fluid can occur in an improperly maintained heat transfer system, and also for other reasons, including operating the system above the fluid's recommended operating temperature and failure to maintain proper fluid velocity. Degradation or decomposition of the fluid may also create "low boiler" hydrocarbon compounds or light ends. The occurrence of any of the foregoing conditions may lead to an increased risk of explosion and/or fire.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonyms** Reclaimed T-59.

Chemical Name	CAS No	Weight-%
Ethyl diphenylethane	64800-83-5	30-60
Diethyl diphenyl ethane	68398-19-6	10-30
(phenyl ethyl) benzene	38888-98-1	10-30
Ethylbenzene homopolymer	27536-89-6	7-13

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/ attention.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	Do not induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician immediately.

**Most important symptoms and effects**

**Symptoms** May cause eye, skin and respiratory tract irritation.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Do not scatter spilled material with high pressure water streams.

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous Combustion Products** Carbon oxides, Soot. Smoke. Hydrocarbons.

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Ensure adequate ventilation, especially in confined areas.

**Environmental Precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. Collect spillage. See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Dike far ahead of liquid spill for later disposal. Absorb with inert material or sweep up, and then place in suitable container for chemical waste.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on Safe Handling** Wash face, hands, and any exposed skin thoroughly after handling. Use personal protection recommended in Section 8. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin, eyes or clothing.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up.

**Incompatible Materials** Strong oxidizing agents. Ignition sources.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines** No exposure limits noted for ingredient(s) The following information is given as general guidance

**Appropriate engineering controls**

**Engineering Controls** Maintain eye wash fountain and quick-drench facilities in work area.

**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Safety goggles.
<b>Skin and Body Protection</b>	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
<b>Respiratory Protection</b>	In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.
<b>General Hygiene Considerations</b>	Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Odor</b>	Faint aromatic odor
<b>Appearance</b>	Light yellow liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Light yellow		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
<b>pH</b>	Not determined		
<b>Melting Point/Freezing Point</b>	Not determined		
<b>Boiling Point/Boiling Range</b>	Not determined		
<b>Flash Point</b>	146.11 °C / 295 °F		
<b>Evaporation Rate</b>	Not determined		
<b>Flammability (Solid, Gas)</b>	Liquid-not applicable		
<b>Upper Flammability Limits</b>	Not determined		
<b>Lower Flammability Limit</b>	Not determined		
<b>Vapor Pressure</b>	Not determined		
<b>Vapor Density</b>	Not determined		
<b>Specific Gravity</b>	0.964 grams/ ml	@ 25 °C (77 °F)	
<b>Water Solubility</b>	Not determined		
<b>Solubility in other solvents</b>	Not determined		
<b>Partition Coefficient</b>	Not determined		
<b>Auto-ignition Temperature</b>	Not determined		
<b>Decomposition Temperature</b>	Not determined		
<b>Kinematic Viscosity</b>	Not determined		
<b>Dynamic Viscosity</b>	Not determined		
<b>Explosive Properties</b>	Not determined		
<b>Oxidizing Properties</b>	Not determined		

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous Polymerization**      Hazardous polymerization does not occur.

### Conditions to Avoid

Ignition sources.

**Incompatible Materials**

Strong oxidizing agents. Ignition sources.

**Hazardous Decomposition Products**

Carbon oxides.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information****Eye Contact**

Irritating to eyes.

**Skin Contact**

Irritating to skin. Prolonged contact may cause redness and irritation.

**Inhalation**

Avoid breathing vapors or mists.

**Ingestion**

May cause discomfort if swallowed.

**Component Information****Information on physical, chemical and toxicological effects****Symptoms**

Signs and symptoms of overexposure: headache, dizziness / incoordination, nausea/vomiting, loss of consciousness, vertigo, confusion, anxiety, laboured breathing, drowsiness.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Carcinogenicity**

Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

Not determined

**Unknown Acute Toxicity**

100% of the mixture consists of ingredient(s) of unknown toxicity.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Not determined

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION**

<b>Note</b>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<b>DOT</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG</b>	Not regulated

**15. REGULATORY INFORMATION****International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Ethyl diphenylethane	Present	X		Present		Present	X	Present	X	X
Diethyl diphenyl ethane	Present	X		Present		Present	X			
(phenyl ethyl) benzene	Present	X		Present			X	Present	X	
Ethylbenzene homopolymer	Present	X								

**Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations****CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated under applicable state right-to-know regulations

<b>16. OTHER INFORMATION</b>
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<b><u>NFPA</u></b>	<b>Health Hazards</b> 1	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Special Hazards</b> Not determined
<b><u>HMIS</u></b>	<b>Health Hazards</b> 1	<b>Flammability</b> 1	<b>Physical Hazards</b> 0	<b>Personal Protection</b> G

<b>Issue Date:</b>	13-Nov-2014
<b>Revision Date:</b>	06-Jul-2018
<b>Revision Note:</b>	Changed product name

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**